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EXAMINER
BAROT, BHARAT

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/702,184	MINEI ET AL.
	Examiner	Art Unit	
	BHARAT BAROT	2455	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>02 September 2010</u>.

2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-14,16,17,19 and 24-48</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1-14, 16-17, 19, and 24-48</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

REOPEN PROSECUTION

1.   In view of the response (Applicant's arguments and amendments, and request for re-open prosecution) filed on September 02, 2010, PTO office mailed the notice of DISMISSING APPEAL on December 13, 2010; therefore, the PROSECUTION IS HEREBY REOPENED. The new grounds of rejection are set forth below.

        To avoid abandonment of the application, appellant must exercise one of the following two options:

        (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

        (2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

        A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

        /EMMANUEL L. MOISE/

        Supervisory Patent Examiner, Art Unit 2455

2.   Claims 1-14, 16-17, 19, and 24-48 remain for further examination.

The new grounds of rejection

3.   Applicants' arguments with respect to claims 1-14, 16-17, 19, and 24-48

filed on September 02, 2010 have been fully considered but they are deemed to

be moot in view of the new grounds of rejection.

Claim Rejections - 35 USC § 112

4.   Claims 25 and 42-43 are rejected under 35 U.S.C. 112, second

paragraph, as being indefinite for failing to particularly point out and distinctly

claim the subject matter which applicant regards as the invention.

5.   Claim 25 recites the steps of: determining…the message includes

extended information, determining using a first part of the message…, and

determining using a second part of the message; claim 42 recites the step of:

generating, if it is determined to generate a further message to signal the label-

switched path, a label mapping message; and claim 43 recites the step of:

generating, if it is determined to generate a further message to signal the label-

switched path, a label mapping message including an outgoing label, and

creating a forwarding state binding between the outgoing label and a label in the

message.

6.   This limitation invokes 35 USC § 112, paragraph 6 because it meets the
3-prong analysis set forth in MPEP 2181 as it recites the phrase "means for" or
"step of" and the phrase is modified by functional language and it is not modified

by sufficient structure, material, or acts for performing the recited function. Also
see *Altiris Inc. v. Semantec Corp.*, 318 F.3d 1363, 1375 (Fed. Cir.2003).

35 USC § 112, paragraph 6, requires such claim to be construed to cover
the corresponding structure, material, or acts described in the specification and
equivalents thereof.

The corresponding structure for a computer-implemented function must
include the algorithm as well as the general purpose computer. *WMS
Gaming,Inc. v. International Game Technology*, 184 F.3d 1339, 51 USPQ2d
1385 (Fed.Cir.1999).

The written description must at least disclose the algorithm that transforms
the general purpose microprocessor to a special purpose computer programmed
to perform the claimed function. *Aristocrat*, 521F.3d at 1338, 86 USPQ2d at
1242.

7.   In the instant application, the following portions of the specification and

drawings may appear to describe the corresponding structure for performing the

claimed function:

(Reference to claim 25) In paragraph [0060] states: Figure 10 is a block

diagram of a machine 1000 which may be used to perform one or more of the

operations,…Machine 1000 may include a processor 1010,…Operations

consistent with principles of the invention may be performed by processor 1010

executing instructions. The instructions may be stored in storage device 1020

and/or received via input/output interface 1030. The instructions may be

functionally grouped into processing modules."

In paragraph [0061] states: "Machine 1000 may be a router, for example.

In an exemplary router, processor 1010 may include a microprocessor and/or

(e.g., custom) integrated circuits.…At least some of storage devices 1020 may

include program instructions defining an operating system (OS), a protocol

daemon, and/or other daemons. In one embodiment, methods consistent with the

principles of the invention may be performed by processor 1010 executing the stored program instructions. At least a portion of the instructions may be stored (temporarily or more permanently) on storage device 1020 and/or may be received from an external source via input interface unit 1030."

(Reference to claim 42) In paragraph [0049] states: "The LSP may be signaled by having the node generate and send its own label mapping message and by creating the forwarding state binding between this outgoing label and the label received."

(Reference to claim 43) In Paragraph [0060] states: "Operations consistent with principles of the invention may be performed by processor 1010 executing instructions"

In paragraph [0061] states: "methods consistent with the principles of the invention may be performed by processor 1010 executing the stored program instructions. At least a portion of the instructions may be stored (temporarily or more permanently) on storage device 1020 and/or may be received from an external source via input interface unit 1030."

8.   However, the specification and drawings do not disclose sufficient corresponding structure, material or acts for performing the claimed function.

The Specification indicates that the functions of the three steps specified in claim 25 may be carried by processor 1010 executing program instructions stored in storage devices 1020 or received from an external source. However, the Specification does not provide any software instructions, or algorithms that

are to be executed by processor 1010 in order to perform the claimed

determining functions. As such, Appellants have failed to adequately describe

sufficient structure for performing the functions claimed.

The Specification indicates that the functions of the step of generating a

label mapping message, specified in claim 42, and the step of creating a

forwarding state binding between the outgoing label and a label in the message,

specified in claim 43, may be carried out by processor 1010 executing program

instructions stored in storage devices 1020 or received from an external source.

However, the Specification does not provide any software instructions, or

algorithms that are to be executed by processor 1010 in order to perform the

claimed generating and creating functions. As such, Appellants have failed to

adequately describe sufficient structure for performing the functions claimed.

Claim Rejections - 35 USC § 101

9.   35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine,
manufacture, or composition of matter, or any new and useful improvement
thereof, may obtain a patent therefor, subject to the conditions and requirements
of this title.

10.   Claims 14, 16-17, 19, and 24 are rejected under 35 U.S.C. 101 because

the claimed inventions of the claims 14, 16-17, 19, and 24 are directed to non-

statutory subject matter.

Claim 14 recited "A machine-readable storage device storing…: a first field…, a second field…, and a third field…" which is directed to non-statutory subject matter for at least the reason that the plurality o fields are not in manner so as to be executable in/by a computer/processor. Further, a collection of fields (data structure), per se, is not an actual program product or an executable instructions/codes, instead being non-functional descriptive material. Thus the rejection under 101 as being an abstract idea, not being tangibly embodied, and not being in a manner so as to be executable in or by a computer or processor.

Other dependent claims, which are not specifically cited above are also rejected because of the deficiencies of their respective parent claims.

Claim Rejections - 35 USC § 103(a)

11.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

12.   Claims 1-14, 16-17, 19, and 24-48 are rejected under 35 U.S.C. 103(a) as

being unpatentable over Tinsley et al (U.S. Patent No. 6,965,592) in view of

Renwick et al (U.S. Patent No. 7,151,775).

13.   As to claim 1, Tinsley et al teach a method comprising: receiving a

message for establishing a label-switched path (figures 8-9; and column 10 lines

20-24); determining whether or not the message includes extended information

(reference teach that check the message has extension header) (figures 4s; and

column 5 line 57 to column 6 line 28); if the message does not include extended

information (MPLS header), determining, using a first part of the message (IP

header) and routing information (reference teach that using IP header for

routing); and if the message does include extended information (MPLS header),

determining, using a second part of the message (MPLS header) and routing

information (reference teach that using MPLS header for routing) (figures

6A-6B and 8-9; column 6 line 56 to column 7 line 57; and column 10 line 16 to

column 11 line 29).

        However, Tinsley et al do not explicitly teach that whether or nor to

generate a further message to signal the label-switched path.

        Renwick et al teach a method (see abstract; and column 1 lines 27-35),

comprising: whether or nor to generate a further message to signal the label-

switched path based on determining whether or not the message includes

extended information/MPLS header (reference teach that sending a path setup

signal based on the MPLS header) (see abstract; column 1 lines 50-62; column 2 lines 5-26 and 41-65; column 3 lines 34-50; column 5 lines 6-27; and column 6 line 65 to column 7 line 20).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Renwick et al stated above in the method of Tinsley et al for generating a further message to signal the label-switched path based on determining whether or not the message includes extended information because it would have provided much faster and more efficient than IP forwarding, used efficiently in an environment with multiple parallel links, and saved considerable processing time, which leads to improved network operation (see Renwick et al column 4 lines 24-35).

14.   As to claims 2-5, Tinsley et al do not explicitly teach that the message is a label-mapping message, the message includes a FEC-label association and a label distribution protocol label-mapping, and the routing information was determined using an interior gateway protocol.

Renwick et al teach that the message is a label-mapping message, the message includes a FEC-label association and a label distribution protocol label-mapping, and the routing information was determined using an interior gateway protocol (Forward data packet using label switching, column 2 lines 5-65; column 5 lines 6-27; and column 6 lines 16-31).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Renwick et al stated above in

the method of Tinsley et al for using a label-mapping message and an interior

gateway protocol for routing information because it would have provided much

faster and more efficient forwarding scheme than IP forwarding and saves

considerable processing time, which leads to improved network operation (see

Renwick et al column 4 lines 24-35).

15.   As to claims 6-7, Tinsley et al teach that the extended information includes

resolution next hop information and the resolution next hop information includes

a host address or prefix (Hope limit and addresses, figures 4-6; and column 5

line 57 to column 7 line 57).

16.   As to claims 8-10, Tinsley et al do not explicitly teach that the method is

performed by a first node in a network domain, and the host address or prefix is

of a second node in the network domain; and the second node is an autonomous

system border router, the first node runs an interior gateway protocol for

generating routing information in the first node, and the routing information

includes an entry for the second node.

       Renwick et al teach that the method is performed by a first node in a

network domain, and the host address or prefix is of a second node in the

network domain; and the second node is an autonomous system border router,

the first node runs an interior gateway protocol for generating routing information

in the first node, and the routing information includes an entry for the second

node (working independently as a router, figures 1-2; column 2 lines 5-65; and column 4 line 59 to column 6 line 32).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Renwick et al stated above in the method of Tinsley et al for using the first node in a network domain and the second node as an autonomous system border router because it would have provided much faster and more efficient than IP forwarding and saved considerable processing time, which leads to improved network operation (see Renwick et al column 4 lines 24-35).

17.   As to claims 11-13, Tinsley et al do not explicitly teach that the node is an ingress node of the label-switched path; and the method is performed by a second node in a first network domain, wherein the ingress node is in a second network domain.

Renwick et al teach that the first part of the message includes an address or prefix of a node, the node is an ingress node of the label-switched path; and the method is performed by a second node in a first network domain, and the ingress node is in a second network domain (figures 1-2; column 1 lines 50-62; column 2 lines 5-40; column 3 lines 9-50; and column 4 line 59 to column 6 line 32).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Renwick et al stated above in the method of Tinsley et al for using the node is an ingress node of the label-

switched path, wherein the ingress node is in a second network domain because
it would have provided much faster and more efficient than IP forwarding and
saved considerable processing time, which leads to improved network operation
(see Renwick et al column 4 lines 24-35).

18.   As to claim 14, Tinsley et al disclose that a message comprising: a) a first
field including a label; b) a second field including forwarding equivalency class
information; and c) a third field including label-switched path signaling resolution
information, stored all fields in association with the label-switched path (figures 4-
6; and column 5 line 57 to column 7 line 57), the label-switched path signaling
resolution information including one of a host address and host prefix (Different
addresses and headers, figures 4-6; and column 5 line 57 to column 7 line 57).

        However, Tinsley et al do not explicitly teach a forwarding device,
receiving the message, processes the message to (1) determine whether or not
the forwarding device has a routing table entry that matches at least one of (A)
the forwarding equivalency class information included in the second field, and (B)
the host address or the host prefix included in the third field, and (2) use the label
included in the first field for forwarding data only if the forwarding device
determined that the forwarding device has a routing table entry that matches at
least one of (A) the forwarding equivalency class information included in the
second field, and (B) the host address or the host prefix included in the third field.

        Renwick et al disclose a forwarding device, receiving the message,
processes the message to determine whether or not the forwarding device has a

routing table entry and use the label included in the first field for forwarding data only if the forwarding device determined that the forwarding device has a routing table entry those match at least one of (A) the forwarding equivalency class information included in the second field, and (B) the host address or the host prefix included in the third field (figures 1-2; column 2 lines 5-40; and column 4 line 59 to column 6   line 32).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Renwick et al stated above in the method of Tinsley et al for forwarding equivalency class information because it would have provided much faster and more efficient than IP forwarding, used efficiently in an environment with multiple parallel links, and saved considerable processing time, which leads to improved network operation (see Renwick et al column 4 lines 24-35).

19.   Claims 16-17, 19, and 24 do not teach or define any new or additional limitations above claims 2-5 and 8-13 and are rejected for the same reasons set forth.

20.   Claims 25-37 do not teach or define any new or additional limitations above claims 1-13 and are rejected for the same reasons set forth.

21.   As to claim 38, Tinsley et al teach that the second part of the message includes at least one of a host address and/or prefix corresponding to a node

within a local network domain (figures 4-6; and column 5 line 57 to column 7 line 57).

22.   Claim 39 does not teach or define any new or additional limitations above claim 38 and is rejected for the same reasons set forth.

23.   As to claims 40-41, Tinsley et al do not explicitly teach generating, if it is determined to generate a further message to signal the label-switched path, a label mapping message; generating, if it is determined to generate a further message to signal the label-switched path, a label mapping message including an outgoing label; and creating a forwarding state binding between the outgoing label and a label in the message.

          Renwick et al teach that generating, if it is determined to generate a further message to signal the label-switched path, a label mapping message; generating, if it is determined to generate a further message to signal the label-switched path, a label mapping message including an outgoing label; and creating a forwarding state binding between the outgoing label and a label in the message (reference teach that sending a path setup signal based on the MPLS header, see abstract; column 1 lines 50-62; column 2 lines 5-26 and 41-65; column 3 lines 34-50; column 5 lines 6-27; and column 6 line 65 to column 7 line 20).

          It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Renwick et al stated above in

the method of Tinsley et al for generating a further message to signal the label-switched path based on determining whether or not the message includes extended information because it would have provided much faster and more efficient than IP forwarding, used efficiently in an environment with multiple parallel links, and saves considerable processing time, which leads to improved network operation (see Renwick et al column 4 lines 24-35).

24.   Claims 42-43 do not teach or define any new or additional limitations above claims 40-41 and are rejected for the same reasons set forth.

25.   As to claim 44, Tinsley et al teach a method for use by a data forwarding device comprising: receiving a first/second messages for establishing a label-switched path (figures 8-9; and column 10 lines 20-24); determining whether or not the messages includes extended information (reference teach that check the message has extension header) (figures 4s; and column 5 line 57 to column 6 line 28); finding a first label-switched route matching a first part of a first message; if the first message does not include extended information (MPLS header), determining, using a first part of the message (IP header) and routing information (reference teach that using IP header for routing); determining that an interface of the first matching label-switched route found matches an interface on which the first message was received (figure 7; column 8 lines 10-33; and column 12 line 43 to column 13 line 5); finding a second label-switched route using a second part of the second message; if the message does include

extended information (MPLS header), determining, using a second part of the

message (MPLS header) and routing information (reference teach that using

MPLS header for routing); and determining that an interface of the second

matching label-switched route found matches an interface on which the second

message was received (figure 7; column 8 lines 10-33; and column 12 line 43 to

column 13 line 5) (figures 6A-6B and 8-9; column 6 line 56 to column 7 line 57;

and column 10 line 16 to column 11 line 29).

   However, Tinsley et al do not explicitly teach that whether or nor to

generate a further messages to signal the label-switched paths.

   Renwick et al teach a method (see abstract; and column 1 lines 27-35),

comprising: whether or nor to generate a further messages to signal the label-

switched paths based on determining whether or not the message includes

extended information/MPLS header (reference teach that sending a path setup

signal based on the MPLS header) (see abstract; column 1 lines 50-62; column 2

lines 5-26 and 41-65; column 3 lines 34-50; column 5 lines 6-27; and column 6

line 65 to column 7 line 20).

   It would have been obvious to one of ordinary skill in the art at the time the

invention was made to incorporate the teaching of Renwick et al stated above in

the method of Tinsley et al for generating a further message to signal the label-

switched path based on determining whether or not the message includes

extended information because it would have provided much faster and more

efficient than IP forwarding, used efficiently in an environment with multiple

parallel links, and saved considerable processing time, which leads to improved

network operation (see Renwick et al column 4 lines 24-35).

26.   Claims 45-48 do not teach or define any new or additional limitations

above claims 2-4 and 6 and are rejected for the same reasons set forth.

Response to Arguments

27.   The examiner summarizes the various points raised by the appellant and

addresses them individually.

28.   As per appellants' arguments filed on December 01, 2008 and November

02, 2010, appellants argued in substance that:

(A)   **Argument:** Appellant's arguments (Pages 11-12, respect to claims 25 and

42-43) with respect to 112 rejections have been fully considered, but applicant's

amendments and arguments are not sufficient and not found persuasive;

therefore, the rejections to claims 25 and 42-43 have been maintained.

(B)   **Argument:** Appellant argues (Brief Page 13, respect to claim 14) that the

data structure need not be program instructions executable by a computer or a

processor, and (Brief Page 14) claim 14 recites a physical or logical relationship

among data elements, designed to support specific data manipulation functions

stored on a machine-readable storage device; therefore, the claims 14, 16, 17,

19, and 24 recites statutory subject matter in view of the foregoing.

Response: Claim 14 is rejected under 35 U.S.C. 101 because the

claimed invention of the claim 14 is directed to non-statutory subject matter.

Claim 14 recited "A machine-readable storage device storing...: a first field..., a

second field..., and a third field..." stored information associated with a label

switch path, which is not an actual program product and "a forwarding device"

does not execute these fields to perform the process/method, which is non-

functional descriptive material. Thus the rejection under 101 as being an abstract

idea, not being tangibly embodied, and not being in a manner so as to be

executable in or by a computer or processor.

(C)   Argument: Appellant argues (Brief Pages 15 and 21-24), that claims 1,

25, and 44 are not rendered obvious by the Tinsley and Renwick patents, and

(Brief Pages 16 and 22) the combination of the Tinsley and Renwick do not

concern receiving a message for establishing a label-switched path as recited in

the claims 1, 25, and 44.

Response: Tinsley et al teaches *receiving a message for establishing a*

label-switched path (figures 8-9; and column 10 lines 20-24).

Renwick et al teaches *sending a path setup signal based on the MPLS*

header (see abstract; column 1 lines 50-62; column 2 lines 5-26 and   41-65;

column 3 lines 34-50; column 5 lines 6-27; and column 6 line 65 to column 7 line

20).

(D)   Argument: Appellant disagrees (Brief Page 16, respect to claim 1) with the characterizations that the MPLS header of the Tinsley patent as both the claimed "second part of a message" and the claimed "extended information".

    Response: Specifically, Tinsley patent discloses that check the message including MPLS header, which is "second part of a message" (see figure 6A and column 7 lines 22-39), and check the MPLS header including extended fields, which is "extended information" (see figure 6B and column 7 lines 40-52), which reads on the claimed limitations.

(E)   Argument: Appellant argues (Brief Pages 17 and 23, respect to claim 1) that the combination of the Tinsley and Renwick do not determine whether to use a first part or a second part of a message to generate a further message for signaling the label-switched path depending on whether the message includes extended information.

    Response: Specifically, Tinsley patent discloses that message has only IPv6 header and extension headers are optional, and routing the packet based on its IP header information (column 5 lines 57-66 and column 6 lines 56-65), which inherently implies not to generate a further message to signal the label-switched path. Also Tinsley patent discloses that the message has MPLS header, and routing the packet based on its MPLS header information (column 6 line 56 to column 7 line 5); and Renwick patent teaches sending a path setup signal based on the MPLS header (column 2 lines 5-26 and 41-65), which reads

on the claimed limitation of generate a further message to signal the label-
switched path.

(F)   Argument: Appellant argues (Brief Page 18, respect to claim 1) that the
Examiner has failed to establish a prima facie case of obviousness and not
shown that there is some suggestion or motivation to combine the Tinsley and
Renwick Patents.

   Response: Examiner establishes a prima facie case of obviousness (see
rejection of claim 1) and shows that there is some suggestion or motivation to
combine the Tinsley and Renwick because Tinsley teaches that determining
weather or not the message includes extended information and using specific
routing information based on the determining step (figures 4s, 6s, and 8-9; and
column 6 line 56 to column 7 line 20); and Renwick teach that sending a path
setup signal based on the MPLS header (see abstract; and column 2 lines 5-26
and 41-65).

   It would have been obvious to one of ordinary skill in the art at the time the
invention was made to incorporate the teaching of Renwick et al in the method of
Tinsley et al for generating a further message to signal the label-switched path
based on determining whether or not the message includes extended information
because it would have provided much faster and more efficient than IP
forwarding, used efficiently in an environment with multiple parallel links, and
saved considerable processing time, which leads to improved network
operation(see Renwick et al column 4 lines 24-35).

(G)   **Argument:** Appellant argues (Brief Pages 19-20, respect to claim 14) that the claim 14 is not rendered obvious by the Tinsley and Renwick patents.

Response: Tinsley et al disclose that a message comprising: a) a first field including a label; b) a second field including forwarding equivalency class information; and c) a third field including label-switched path signaling resolution information, stored all fields in association with the label-switched path (figures 4-6; and column 5 line 57 to column 7 line 57), the label-switched path signaling resolution information including one of a host address and host prefix (Different addresses and headers, figures 4-6; and column 5 line 57 to column 7 line 57). However, Tinsley et al do not explicitly teach the function of a forwarding device.

Renwick et al disclose a forwarding device, receiving the message, processes the message to determine whether or not the forwarding device has a routing table entry and use the label included in the first field for forwarding data only if the forwarding device determined that the forwarding device has a routing table entry those match at least one of (A) the forwarding equivalency class information included in the second field, and (B) the host address or the host prefix included in the third field (figures 1-2; column 2 lines 5-40; and column 4 line 59 to column 6   line 32).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Renwick et al stated above in the method of Tinsley et al for forwarding equivalency class information because it would have provided much faster and more efficient than IP forwarding, used

efficiently in an environment with multiple parallel links, and saved considerable processing time, which leads to improved network operation. Accordingly, appellant's arguments that the claim 14 is not rendered obvious by the Tinsley and Renwick patents are moot.

(H)   Argument: Appellant argues (Brief Pages 25-26, respect to claims 6-8, 10, 30-32, 34, and 47) that the Tinsley does not teach that the extended information or the second part of the message includes resolution next hop information.

Response: Tinsley explicitly teaches that the extended information or the second part of the message includes resolution next hop information (see figures 4A-4B and column 5 line 57 to column 6 line 28).

(I)   Argument: Appellant argues (Brief Pages 27-28, respect to claims 9 and 33) that the Renwick does not teach that the second node is an autonomous system border router.

Response: Renwick explicitly teaches that the second node is an autonomous system border router (figures 1-2; column 2 lines 5-65; and column 4 line 59 to column 6 line 32). Also Renwick teaches that the egress node sends its allocated label back to the next preceding node, which stores the label and generates its own label for the traffic and transmits that label back to its next preceding node, which implies that the second node is an autonomous system

border router (working independently as a router) (see figures 1-2 and column 2
lines 5-65).

It would have been obvious to one of ordinary skill in the art at the time the
invention was made to incorporate the teaching of Renwick et al stated above in
the method of Tinsley et al for using the first node in a network domain and the
second node as an autonomous system border router because it would have
provided much faster and more efficient than IP forwarding and saved
considerable processing time, which leads to improved network operation.

(J)   **Argument:** Appellant argues (Brief Page 29, respect to claims 13 and 37)
that the Renwick does not teach that the method is performed by a second node
in a first network domain, and the ingress node is in a second network domain

Response: Renwick explicitly teaches that the method is performed by a
second node in a first network domain, and the ingress node is in a second
network domain (figures 1-2; column 1 lines 50-62; column 2 lines 5-65; column
3 lines 34-50; and column 4 line 59 to column 6 line 32).

It would have been obvious to one of ordinary skill in the art at the time the
invention was made to incorporate the teaching of Renwick et al stated above in
the method of Tinsley et al for using the node is an ingress node of the label-
switched path, wherein the ingress node is in a second network domain because
it would have provided much faster and more efficient than IP forwarding and
saved considerable processing time, which leads to improved network operation.

Contact Information

29.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Bharat Barot** whose Telephone Number is **(571) 272-3979**. The examiner can normally be reached on Monday-Friday from 7:00 AM to 3:30 PM. Most facsimile-transmitted patent application related correspondence is required to be sent to the Central FAX Number **(571) 273-8300**.

    If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Emmanuel Moise**, can be reached at **(571) 272-3865**.

/Bharat N Barot/

Primary Examiner, Art Unit 2455

June 10, 2011

/EMMANUEL L. MOISE/

Supervisory Patent Examiner, Art Unit 2455